

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V

DATE: May 4, 1995

SUBJECT: Trip Report - American Chemical Services, Griffith, IN

FROM: James Chapman, Ph.D., Ecologist, Technical Support Section

TO: Sheri Bianchin, RPM, Remedial Response Section #6

The site visit was conducted May 3, 1995, with Steve Mangion, EPA Technical Liaison; Joseph Adams, Jr. and Martin Hamper, Montgomery Watson; and yourself. The following documents were consulted in writing this report: Revised Draft Ecological Risk Assessment for American Chemical Services, Griffith, Indiana, February 1992, Roy F. Weston, Inc. prepared for U.S. EPA; and Robin Nims, USFWS. Wetlands Delineation at American Chemical Services Hazardous Waste Site, Griffith, Indiana, Appendix N of the Draft Remedial Investigation Report, ACS NPL Site (Sept. 1990), Warzyn Engineering Inc. prepared for Steering Committee ACS PRP Group.

My primary concern is with sediment sample SD16 because the ecological risk assessment is largely driven by the results at this location (Wetland I). The following contaminants exceeded sediment benchmark values at SD16 (concentration in mg/kg, Appendices Q and R of the Draft RI):

Cr 273 Cu 359 Pb 702 Hg 8.8 Zn 224 PCBs 5 (1254)

The Draft RI provides general descriptions of the phase I sediment sample locations (SD01-SD09), such as "marshy" area or drainage ditch (Section 3.3.3.1); and gives an aggregate description of the phase II samples (SD10-SD15) as taken along surface water drainage routes between ACS and the landfill where groundwater discharges to the surface and becomes runoff (Section 3.3.3.2). However, the sample location for SD16 is not described other than being marked on Figure 2-4. The section in which the nature and extent of surface sediment and soil contamination was to be discussed is blank in the Draft RI (Section 5.3). A goal of the site visit was to reconnoiter the area surrounding SD16 since the Draft RI provides no information on the characteristics of this important sample location.

I approximately located SD16 in the field relative to the boundaries of the forest areas shown in Figure 2-4 of the Draft RI. SD16 appears to have been in the southeastern extension of the cattail marsh¹ (PEMF of the wetland

¹ The sample location could not be accurately determined because some of the details of the forest boundaries did not correspond with the actual vegetational patterns in the field.

delineation)². Sediment samples SD03 and SD04 were located between SD16 and the ACS facility, taken from surface runoff routes in "the marsh" according to the Draft RI, but did not show significant contamination. SD03 may have been located in the forest/scrub-shrub wetland (P FO/SS 1C)³. SD04 may have been taken from the seasonally-flooded emergent wetland (PEMC)⁴ or the semipermanently flooded emergent wetland (PEMF). If the latter, SD04 and SD16 were taken from the same wetland mapping unit, however, the vegetation dramatically changes between the two locations. The emergent vegetation at SD16 is dominated by cattails, but immediately east (closer to the ACS facility) changes to a grass/sedge wet meadow⁵. None of the other sediment samples were located in the cattail marsh besides SD16.

The point of this lengthy discussion is that the seemingly anomalous results at SD16 may be related to its unique vegetational and hydrological characteristics in comparison with the other sample locations. Since the cattail marsh comprises the majority of the area of Wetland I and has a high wildlife value, I recommended that at least three of the next round of sediment samples be taken in the cattail marsh (and one in the wet meadow), and requested oversight of the sampling. There was verbal agreement for both points.

I may be contacted at 6-7195 if you have questions or comments. Please fill out the attached evaluation form and return it to Steve Ostrodka, HST-6J. The information is used to assess and improve our services.

cc: Steve Ostrodka, Chief, TSS Margaret Guerriero, Chief, RRS #6

² PEMF stands for palustrine emergent (herbaceous vegetation) wetland that is semipermanently flooded.

³ P FO/SS 1C stands for palustrine broad-leaved deciduous mixed forest/scrub-shrub wetland that is seasonally flooded.

⁴ PEMC stands for palustrine emergent (herbaeous vegetation) wetland that is seasonally flooded.

⁵ The change in the type of herbaceous vegetation does not affect the wetland classification.